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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,463	04/09/2004	George G. Pappas	LUM 204	1073
2555	7590	03/14/2006	EXAMINER	
KREMBLAS, FOSTER, PHILLIPS & POLLOCK 7632 SLATE RIDGE BOULEVARD REYNOLDSBURG, OH 43068			EARLY, MICHAEL JACOBY	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,463

Applicant(s)

PAPPAS, GEORGE G.

Examiner

Michael J. Early

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 40. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 – 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. 4,225,552) in view of Marcus et al. (U.S. 4,568,270).

Chang discloses a decorative candle comprising:

- a wick (11 – wick) surrounded by a solid wax fuel body (as seen in Figures 1, 4);
- an upper fuel region (15 – outer shell) of the solid fuel body (as seen in Figure 4) having a first melting point (see col. 2, lines 33 – 40);

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- a lower fuel region (10 – core) of the fuel body (as seen in Figures 1, 4) having a second melting point at a lower temperature than the first melting point (see col. 2, lines 5 – 9 & 38 – 40);
- the fuel body is wax (see col. 2, lines 5 – 8, 33 – 38);
- the lower fuel region is cylindrical (as seen in Figure 1);
- the lower fuel region has a diameter less than the diameter of the upper fuel region (as seen in Figures 1, 4, 5);
- the lower fuel region is only below the wick (although the wick is enclosed within the candle's lower fuel region, no portion of the core is seen to be located above the wick; Figure 1);
- the lower fuel region has a diameter substantially equal to the diameter of the upper fuel region (the lower fuel region's diameter is substantially equal to, in the broadest sense of terms; however less, than the upper fuel region's; as seen in Figures 1, 2, 4; the word "substantially" is being interpreted to mean: "being largely but not wholly that which is specified" – On-line source: <http://www.m-w.com>, viewed on 9/14/05 and 2/22/06);
- the first melting point is at least three degrees greater than the second melting point (see col. 2, lines 8 – 9 & lines 38 – 40).

However, Chang does not disclose:

- a lower fuel region that is vertically below the upper fuel region;
- a lower fuel region located and extending at least axially below the wick;
- a sustainer mounted on the lower end of the wick.

Marcus et al. teach of a novel and highly-effective free-standing fragrance candle (10) that is comprised of an outer shell (12), inner core (14) and wick (16) (see col. 2, lines 61 – 63). Further disclosed is that the shell and core are cylindrical and disposed concentrically with respect to each other (see col. 3, lines 27 – 29; Figures 1, 2, 7).

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Further disclosed is that a sustainer (22) is clamped around the lower end of the wick (16c) (as seen in Figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Chang by locating the outer shell: vertically below the inner core and at a position where it extends at least axially below the wick, as taught by Marcus et al., for aesthetic purposes.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Chang by incorporating a sustainer along the end of the candle's wick, as taught by Marcus et al., as a safety feature (see col. 3, lines 42 – 49).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Marcus et al. and in further view of Pappas (U.S. 5,842,850).

However, Chang in view of Marcus et al. does not disclose:

- the lower fuel region is frusto-conical.

Pappas teaches of an anti-flash wick support for candles having a candle floor (see Abstract). Further disclosed is that the candle (10) is shaped of an inverted frusto-conical shape (as seen in Figure 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Chang in view of Marcus et al. by forming the candle into an inverted frusto-conical shape, as taught by Pappas, for aesthetic purposes.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Marcus et al. and in further view of Wohl et al. (U.S. 5,597,300).

However, Chang in view of Marcus et al. does not disclose:

- the first melting point is at least six degrees greater than the second melting point.

Wohl et al. teach of candles that have a flame consumable core with a non-consumable outer shell as well as the process of manufacturing the candles (see col. 1, lines 5 – 8). Further disclosed is that the candle's outer shell has a melting point that is at least equal to or at the most twenty-five degrees greater than the melting point of the inner core (see col. 2, lines 48 – 50 and 55 – 60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Chang in view of Marcus et al. by using waxes that have melting points that are at least equal to or at the most twenty-five degrees apart from each other, as taught by Wohl et al., for safety reasons.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Marcus et al. and in further view of Morrison et al. (U.S. 5,879,694).

However, Chang in view of Marcus et al. does not disclose:

- the lower fuel region contains a flame retardant.

Morrison et al. teach of still gel compositions, which may contain advantageous properties, that can be used to form a candle (see col. 2, lines 28 – 31). Further disclosed is that a flame retardant, a functional additive, can be included at a suitable location within the candle's composition in order to automatically extinguish the candle. Marcus et al. further disclosed that the candle will burn in a normal manner until it reaches the area in which the flame retardant is incorporated (see col. 8, lines 22 – 35).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Chang in view of Marcus et al. by including a flame retard within the candle's composition, as taught by Morrison et al., for the purpose of providing a functional additive that enables the candle to extinguish on its own during normal operation.

Claims 12 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wohl et al. in view of Marcus et al.

Wohl et al. disclose of a method for making a candle having a candle fuel body surrounding a wick, comprising of:

- forming an upper fuel region (100 – outer shell) of the fuel body with a void (102 – inner core) extending below the wick (108 – wick; Figure 1b);
- filling the void with a candle fuel having a melting point at a lower temperature than the melting point of the upper fuel region to form a lower fuel region in the void (see col. 3, lines 25 – 36);
- the candle fuel body is a wax (102 – lower melting point wax; col. 4, lines 13 – 16) and a candle fuel wax is filled into the void (see col. 4, lines 11 – 13);
- forming the void in a cylindrical shape (the candle's void can be viewed as being cylindrically shaped with the exception that the diameter along its bottom surface is slightly larger than that on its top surface; Figure 1b);
- the lower fuel region has a diameter less than the diameter of the upper fuel region (as seen in Figure 1b);
- forming the void in a frusto-conical shape (as seen in Figure 1b);
- the void is filled with a wax having a melting point at least six (as well as three) degrees less than the melting point of the upper fuel region (see col. 2, lines 48 – 60).

In addition, for clarification purposes, it should be noted that before the wax of the inner core (102) is poured into the candle's outer shell (100), a void of some sort must be present during the manufacturing process of the candle.

Wohl et al. disclose of a method for making a candle, comprising of:

- forming an upper fuel region (100 – outer shell) around a wick (108 – wick), the upper fuel region formed of a candle fuel having a first melting point (see col. 4, lines 11 – 16);
- forming a lower fuel region (102 – inner core) at one end of the upper fuel region, said lower fuel region being adjacent the wick (as seen in Figure 1b) and having a second melting point at a lower temperature than the first melting point (see col. 3, lines 25 – 36);
- the fuel is wax (see col. 4, lines 11 – 16);
- the lower fuel region is formed in a cylindrical shape (the inner core can be viewed as being cylindrically shaped with the exception that the diameter along its bottom surface is slightly larger than that on its top surface; Figure 1b);
- the lower fuel region is formed with a diameter less than the diameter of the upper fuel region (as seen in Figure 1b);
- the lower fuel region is formed with a diameter substantially equal to the diameter of the upper fuel region (through visual inspection, it can be seen that the inner core is formed with a diameter that is substantially equal to, in the broadest sense of terms, the diameter of the upper fuel region; as seen in Figure 1b; the word “substantially” is being interpreted to mean: “being largely but not wholly that which is specified” – On-line source: <http://www.m-w.com>, viewed on 9/14/05 & 2/22/06);
- the lower fuel region is frusto-conical (as seen in Figure 1b);
- the first melting point is at least three (as well as six) degrees greater than the second melting point (see col. 2, lines 48 – 60);

Again, for clarification purposes, it should be noted that before the wax of the inner core (102) is poured into the candle's outer shell (100), a void of some sort must be present during the manufacturing process of the candle.

However, Wohl et al. do not disclose:

- an upper fuel region with a void extending at least axially and vertically below the wick;
- mounting a sustainer on the lower or one end of the wick;
- the lower fuel region is axially and vertically below the wick.

Marcus et al. teach of a novel and highly-effective free-standing fragrance candle (10) that is comprised of an outer shell (12), inner core (14) and wick (16) (see col. 2, lines 61 – 63). Further disclosed is that the shell and core are cylindrical and disposed concentrically with respect to each other (see col. 3, lines 27 – 29; Figures 1, 2, 7). Further disclosed is that a sustainer (22) is clamped around the lower end of the wick (16c) (as seen in Figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Wohl et al. by creating an inner core that is positioned axially and vertically below the wick, as taught by Marcus et al., for aesthetic purposes.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Wohl et al. by incorporating a sustainer along the end of the candle's wick, as taught by Marcus et al., as a safety feature (see col. 3, lines 42 – 49).

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wohl et al. in view of Marcus et al. and in further view of Morrison et al. (U.S. 5,879,694).

However, Wohl et al. in view of Marcus et al. does not disclose:

- mixing a flame retardant in the lower fuel region.

Morrison et al. teach of still gel compositions, which may contain advantageous properties, that can be used to form a candle (see col. 2, lines 28 – 31). Further disclosed is that a flame retardant, a functional additive, can be included at a suitable location within the candle's composition in order to automatically extinguish the candle. Marcus et al. further disclosed that the candle would burn in a normal manner until it reaches the area in which the flame retardant is incorporated (see col. 8, lines 22 – 35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the existing candle of Wohl et al. in view of Marcus et al. by including a flame retard within the candle's composition, as taught by Morrison et al., for the purpose of providing a functional additive that enables the candle to extinguish on its own during normal operation.

Response to Arguments

Applicant's arguments with respect to claims 1, 12 and 20 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant states that no prior art shows a lower melting point candle fuel located axially below or vertically below the higher melting point candle fuel where the wick can fall into it. This argument is correct; however, the combination(s) of Chang in view of Marcus et al. and Wohl et al. in view of Marcus et al. do provide these teachings.

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Although Chang teaches of a candle comprising of a candle core that is located within and below an outer shell, Marcus et al. disclose of a candle whose outer shell is cylindrical and disposed concentrically beneath its inner core. Thus for one of ordinary skill in the art at the time of the invention, the combined teaching would have been sufficient to meet the claim.

Although Wohl et al. teach of a candle comprising of an inner core (or void – depending on the point in time during the candle's manufacturing process) that is located within and below an outer shell, Marcus et al. disclose of a candle whose outer shell is cylindrical and disposed concentrically beneath its inner core. Thus for one of ordinary skill in the art at the time of the invention, the combined teaching would have been sufficient to meet the claim.

Applicant's response in regard to not including the two patent publications identified on page 10, line 17 of the specification have been acknowledged.

Applicant's response in regard to the listed reference numerals displayed on the drawing but not in the specification have been acknowledged. However, as aforementioned in this Office action, reference numeral 40 was not inserted into the specification and therefore, the drawings for this patent application are still held in objection.

Applicant's amendments to the specification have been acknowledged.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Early whose telephone number is (571) 272-3681. The examiner can normally be reached on Monday - Friday, 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJE
2/23/06

Michael J. Early
Patent Examiner
Art Unit 3744


CHERYL TYLER
SUPERVISORY PATENT EXAMINER
